

**AMENDMENTS TO THE CLAIMS**

1-5. (Cancelled)

6. (Currently amended) A method for identifying a fungicidal compounds, comprising:  
~~identifying compounds that inhibit the enzymatic activity of a ketol-acid reductoisomerase having an amino acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, and SEQ ID NO:3;~~

a) contacting a ketol-acid reductoisomerase with a test compound under conditions required for ketol-acid reductoisomerase enzymatic activity and in the presence of a substrate, wherein the ketol-acid reductoisomerase comprises an amino acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, and SEQ ID NO:3; and

b) measuring the ketol-acid reductoisomerase enzymatic activity;

wherein inhibition of ketol-acid reductoisomerase activity by the test compound indicates that the test compound is a fungicidal compound.

7. (Currently amended) The method of claim 6, further comprising determining whether said compounds that inhibits the enzymatic activity of a ketol-acid reductoisomerase inhibits fungal growth and pathogenesis.

8. (Currently amended) The method of claim 6, wherein ~~said identifying compounds that inhibit the enzymatic activity of a ketol-acid reductoisomerase comprises:~~

a) the ketol-acid reductoisomerase is contacted with the test compound in the presence of magnesium; and NADPH, and a substrate, contacting a test compound with a ketol-acid reductoisomerase having an amino acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, and SEQ ID NO:3; and

~~b) measuring the ketol-acid reductoisomerase enzymatic activity.~~

9. (Currently amended) The method of claim 8 6, wherein said substrate is 2-acetolactate (AL) or 2-aceto-2-hydroxybutyrate (AHB).

10. (Currently amended) The method of claim 8 6, wherein said measuring the ketol-acid reductoisomerase enzymatic activity comprises measuring the decrease in absorption of NADPH at 340nm.

11. (Currently amended) A method for identifying a fungicidal compound ~~The method of claim 6, wherein said identifying compounds that inhibit the enzymatic activity of a ketol-acid reductoisomerase comprises~~ comprising:

a) expressing in a host organism a ketol-acid reductoisomerase ~~having~~ comprising an amino acid sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, and SEQ ID NO:3;

b) purifying the ketol-acid reductoisomerase produced by said host organism;

c) under conditions required for ketol-acid reductoisomerase enzymatic activity and in the presence of ~~magnesium, NADPH, and~~ a substrate, contacting a test compound with said purified ketol-acid reductoisomerase; and

d) measuring the ketol-acid reductoisomerase enzymatic activity,

wherein inhibition of ketol-acid reductoisomerase activity by the test compound indicates that the test compound is a fungicidal compound.

12. (Currently amended) The method of claim 11, wherein said substrate is 2-acetolactate (AL) or 2-aceto-2-hydroxybutyrate (AHB).

13. (Currently amended) The method of claim 11, wherein said measuring the ketol-acid reductoisomerase enzymatic activity comprises measuring ~~the~~ a decrease in absorption of NADPH at 340nm.